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BANS ON SMOKING IN VEHICLES CARRYING **CHILDREN**

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ISSUE

Describe laws in other states banning smoking in vehicles when children are present and any available data on the effect of such laws. This report updates OLR Report 2012-R-0541.

SUMMARY

Seven states (Arkansas, California, Louisiana, Maine, Oregon, Utah, and Vermont) and Puerto Rico have enacted legislation banning smoking in vehicles with children present. The age of children covered by these laws varies from under age eight (Vermont) to under age 18 (California and Oregon). Maximum fines for first-time violations range from \$25 (Arkansas) to \$250 (Oregon and Puerto Rico).

According to the advocacy group Global Advisors on Smokefree Policy, legislation banning or otherwise addressing smoking in cars with children was proposed in 12 states in 2015, including Connecticut. In addition, the National Center for Chronic Disease Prevention and Health Promotion (national center), a division of the Centers for Disease Control and Prevention (CDC), reports that eight states and the District of Columbia restrict smoking in vehicles carrying children in the care of childcare facilities. We have attached the center's list of state restrictions on smoking in motor vehicles in effect as of June 30, 2015.

A ban on smoking in vehicles with minors present will take effect in October in England. A violation is punishable by a fine of £50.

We were unable to find any studies that specifically address the effectiveness of banning smoking in vehicles. However, the Community Preventive Services Task Force, an independent board of experts appointed by the CDC director, strongly recommends smoking bans and restrictions "on the basis of strong scientific

evidence that they reduce exposure" to second-hand smoke. In addition, a number of studies have noted the dangers of second-hand smoke in general, and of second-hand smoke in vehicles in particular.

Exposure to second-hand smoke "is associated with acute respiratory infections, middle ear disease, delayed lung growth, and more severe asthma," a 2012 Pediatrics study noted. "Nonsmoking youth are . . . particularly vulnerable" to second-hand smoke because of "their limited ability to avoid smoke-permitted environments, higher breathing rates, and the developing nature of their respiratory, immune, and nervous systems."

Researchers say that second-hand smoke can be particularly hazardous in the relatively confined space of a car. Opening car windows or vents can reduce, but not eliminate, the danger. A 2011 research paper that monitored car trips involving smokers found that the concentration of fine particulate matter in cars where smoking occurred greatly exceeded international indoor air quality standards and posed a health threat to children (Semple et al.). More recent studies of stationary vehicles found similar results for other harmful compounds.

Similarly, the national center states that "smoking just one cigarette in a vehicle with the windows closed can generate more than 100 times the U.S. Environmental Protection Agency's (EPA's) 24-hour recommended exposure limit to fine respirable particles." These particles, about 1/30th the width of an average human hair, contain cancer-causing chemicals, and can lodge deep in a person's lungs, irritating the respiratory system.

The *Pediatrics* study noted above found that while second-hand smoke "exposure in cars decreased significantly among U.S. middle and high school students from 2000 to 2009," more than one-fifth of these students reported riding in a car in the previous seven days with someone who was smoking.

BANS ON SMOKING IN VEHICLES CARRYING CHILDREN Arkansas

The law bars smoking in motor vehicles carrying children under age 14 (<u>Ark. Rev. Code § 20-27-1903</u>). A violator may be fined up to \$25, but first-time offenders can avoid paying the fine by showing proof they are taking part in a smoking-cessation program. The law does not apply to buses (including school buses) and other public conveyances legally required to have passenger restraint systems.

California

The law bars smoking in a motor vehicle, whether moving or stopped, when a minor (under age 18) is present (<u>Cal. Health and Safety Code § 118947 et seq.</u>). A violation is punishable by a fine of up to \$100. A law enforcement officer cannot stop a vehicle solely to determine whether a driver is violating this law.

Louisiana

The law bars smoking in a motor vehicle where there is a child (under age 13) in a child safety or booster seat, or wearing a seat belt, regardless of whether the windows are open or closed (La. Rev. Stat. § 32:300.4). The law applies to cars, passenger vans, and pick-up trucks. Violators are subject to a fine of up to \$150 or, at the judge's discretion, at least 24 hours of community service. Violation of this provision is considered a primary offense, which means a law enforcement officer may stop a motor vehicle solely because of a violation. But the officer may not search or inspect a motor vehicle, its contents, the driver, or a passenger solely because of a violation of this provision. A violation is a nonmoving violation, and a citation issued by an officer cannot be included on the driver's operating record.

Maine

The law bars an operator or passenger from smoking in a motor vehicle when a child under age 16 is present, regardless of whether the windows are open or closed (22 Me. Rev. Stat. Ann. § 1549). Violators are subject to a \$50 fine, although a law enforcement officer may instead issue a warning. An officer may not search or inspect a motor vehicle, its contents, its driver, or a passenger solely because of a violation of this provision. A violation is a nonmoving violation.

Oregon

The law bars smoking in a motor vehicle when a child under age 18 is present (<u>Ore. Rev. Stat. § 811.193</u>). A first offense is a class D traffic violation, punishable by a fine of up to \$250. A second or subsequent offense is a class C traffic violation, punishable by a fine of up to \$500. A police officer may enforce this provision only if the officer has already stopped and detained the driver for a separate traffic violation or other offense.

Utah

The law generally prohibits smoking in a motor vehicle if a child age 15 or younger is a passenger (<u>Utah Code Ann. § 41-6a-1717</u>). But this ban does not apply if the (1) person is operating a convertible or open-body type motor vehicle and (2) roof is in the open-air mode.

A violation is an infraction, subject to a fine of up to \$45. The court may suspend the fine for a first-time offender who proves to the court that he or she has enrolled in a smoking-cessation program.

The law provides that a police officer may enforce this provision only as a secondary action when the vehicle has been detained for a suspected violation of another motor vehicle law or other offense.

The law also specifies that a violation may not be used as a basis for or evidence of child abuse or neglect.

Vermont

The law prohibits possessing a lighted tobacco product in a motor vehicle that is occupied by a child under age eight required to be properly restrained in a child passenger restraining system (<u>Vt. Stat. Ann. title 23, § 1134b</u>). A violation is subject to a fine of up to \$100. No points are assessed for violations.

Puerto Rico

The law bars smoking in a private transportation vehicle in which there is a child under age 13 or in a car seat (<u>P.R. Laws Ann. title 24, § 892(u)</u>). Violators face a maximum \$250 fine for a first offense (<u>P.R. Laws Ann. title 24, § 898</u>).

EFFECTS OF SECOND-HAND SMOKE ON CHILDREN IN CARS

Various studies have measured children's potential exposure to second-hand smoke in vehicles. For example, a 2011 research paper published in *Tobacco Control* examined a number of car trips averaging about 27 minutes long. Researchers found that the concentration of smoke particles where smoking took place greatly exceeded international indoor air quality standards. Despite the fact that drivers opened windows and vents during the trips, "exposure intensities . . . remained considerable and taken as an average were about three times the [World Health Organization] guidance concentration. Exposure to [fine particulate matter] at the levels reported here is likely to be harmful to respiratory health" (Semple et al.).

A 2014 research paper examined exposure to volatile organic compounds (VOCs) from backseat exposure to second-hand smoke in stationary cars for one hour while an individual sat in the driver's seat and smoked three cigarettes, with windows partially opened. Researchers found significant increases in several toxic or carcinogenic VOCs based on post-exposure testing of the research subjects (St. Helen et al.). Another 2014 research paper found increased levels of various pollutants in stationary vehicles while someone was smoking. The authors

estimated that 10 minutes in the car with a smoker would increase a child's daily mean exposure to fine particulates by as much as 30% in certain window configurations (Northcross et al.).

According to the national center, smoking in vehicles is particularly detrimental to the health of children and nonsmoking adults because it quickly generates high concentrations of second-hand smoke in the relatively small space. With vehicle windows closed, exposure to second-hand smoke "exceeds the levels of [fine respirable] particles found in smoky bars and restaurants." Smoking with windows closed can also significantly increase carbon monoxide "that can harm children even in small quantities." Even with a vehicle's windows or vents open, "particle levels are at least twice the EPA 24-hour recommended exposure limit."

SOURCES AND ADDITIONAL INFORMATION

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